

CLAIMS:

1. (Currently amended) A method, ~~implemented on a~~ in a computer system, for processing user defined Boolean variables in a ~~multi-dimensional~~ multi-dimensional electronic spreadsheet (200) comprising a plurality of cells identified by a cell address along each dimension, said method comprising the steps of:

providing, in the computer system, a user options table data structure identifying one or more user options that are defined as Boolean variables, wherein the user options table data structure comprises a record for each user option of the one or more user options, and wherein each record stores an identifier associated with a corresponding user option for the record;

providing a user interface, in the computer system, through which the one or more user options are defined, wherein a status of the one or more user options is set via the user interface to either a first Boolean variable state corresponding to a "True" state or a second Boolean variable state corresponding to a "False" state;

~~defining one or a plurality of Boolean variables in a table (400), whereby said Boolean variables are managed;~~

referencing said one or plurality of Boolean variables a selected user option of the one or more user options in one or a plurality of cells of the multi-dimensional electronic spreadsheet by including an identifier associated with the selected user option in content of the one or a plurality of cells; [[and]]

determining the content of said cell a value of each of the one or plurality of cells based on a status of the selected user option as either being the first Boolean variable state or the second Boolean variable state, as specified via the user interface; and

wherein each of said Boolean variables can be set as "True" or "False," and impact the content of a cell within an electronic spreadsheet providing an output of the multi-dimensional electronic spreadsheet via an output device of the computer system.

2. (Currently amended) The method according to claim 1, wherein ~~said step of defining one or a plurality of Boolean variables in a table, comprises the further steps of:~~
for each defined Boolean variable:

assigning a name (311) and storing in the table (400) said name (403);
 selecting a status value (303); and
 storing in the table said status value (404) each record in the user options table data structure comprises a user option index, a name of a corresponding user option associated with the record, and a status value of the corresponding user option associated with the record.

3. (Currently amended) The method according to claim 1 ~~further comprising:~~
~~updating in the table the status value (304, 404) of the one or plurality of Boolean variables wherein the user interface comprises:~~

a user options listing portion that lists each of the one or more user options,
a status portion that identifies, for each user option of the one or more user options, a current status of the user option, and
a user controls portion that provides user selectable control elements associated with each of the one or more user options that, when selected by a user via an input device, changes a status of a corresponding user option in the user options listing and updates a corresponding record in the user options table data structure.

4. (Currently amended) The method according to claim 1 wherein referencing a selected user option of the one or more user options in one or a plurality of cells of the multi-dimensional electronic spreadsheet ~~the step of determining the content of said cell or plurality of cells~~ comprises the further step of: inserting a name of the selected user option as a named range variable in an equation of the one or plurality of cells, and wherein determining a value of each of the one or plurality of cells comprises computing the value of said cell the one or plurality of cells according to [[the]] a value of said one or plurality of corresponding to a Boolean variables variable state of the selected user option.

5. (Currently amended) The method according to claim 1 ~~comprising the further step of:~~

~~changing in the table (400) the name (311) of one or a plurality of Boolean variables 3, wherein the user option listing includes an editor through which a name of a user option in the one or more user options is changed.~~

6. (Canceled)

7. (Currently amended) The method according to claim [[1]] 4, ~~wherein comprising the further step of:~~

~~setting the value [[of]] corresponding to the Boolean variable [[to]] state is a numerical one when the status-value Boolean variable state is "True"; or~~

~~setting, and wherein the value [[of]] corresponding to the Boolean variable [[to]] state is a numerical zero when the status-value Boolean variable state is "False."~~

8. (Currently amended) The method according to claim [[1]] 3, ~~wherein said steps of assigning a name, changing the name, selecting a status value, updating the status value are executed by means of an interactive user interface is a graphical user interface, and wherein the control elements are virtual buttons of the graphical user interface.~~

9. (Currently amended) The method according to claim 8, ~~wherein said interactive the user interface comprises a dialog box (300) displayed on a screen (106) of [[a]] the computer system (100).~~

10-11. (Canceled)

12. (New) The method of claim 1, further comprising:

providing an application for execution by the computer system, wherein the application is defined by the multi-dimensional electronic spreadsheet, and wherein the output of the multi-dimensional electronic spreadsheet represents a scenario of the application specified by the status of the one or more user options.

13. (New) The method of claim 1, wherein the output device is a display device, and wherein the output of the multi-dimensional electronic spreadsheet is provided to a user via the display device.

14. (New) The method of claim 3, wherein the one or more user options that are listed in the user options listing portion of the user interface are presented in the user options listing portion according to an index sequence of indices of the one or more user options, starting with an index representing a last recorded user option.

15. (New) A computing system for processing user defined Boolean variables in a multi-dimensional electronic spreadsheet comprising a plurality of cells identified by a cell address along each dimension, the computing system comprising:

a processor;

a storage device coupled to the processor, wherein the storage device provides a user options table data structure identifying one or more user options that are defined as Boolean variables, wherein the user options table data structure comprises a record for each user option of the one or more user options, and wherein each record stores an identifier associated with a corresponding user option for the record; and

a memory coupled to the processor, wherein the memory contains instructions which, when executed by the processor, cause the processor to:

provide a user interface through which the one or more user options are defined, wherein a status of the one or more user options is set via the user interface to either a first Boolean variable state corresponding to a "True" state or a second Boolean variable state corresponding to a "False" state;

reference a selected user option of the one or more user options in one or a plurality of cells of the multi-dimensional electronic spreadsheet by including an identifier associated with the selected user option in content of the one or a plurality of cells;

determine a value of each of the one or plurality of cells based on a status of the selected user option as either being the first Boolean variable state or the second Boolean variable state, as specified via the user interface; and

provide an output of the multi-dimensional electronic spreadsheet via an output device of the computer system.

16. (New) The computing system according to claim 15, wherein each record in the user options table data structure comprises a user option index, a name of a corresponding user option associated with the record, and a status value of the corresponding user option associated with the record.

17. (New) The computing system according to claim 15, wherein the user interface comprises:

- a user options listing portion that lists each of the one or more user options,
- a status portion that identifies, for each user option of the one or more user options, a current status of the user option, and
- a user controls portion that provides user selectable control elements associated with each of the one or more user options that, when selected by a user via an input device, changes a status of a corresponding user option in the list user options listing and updates a corresponding record in the user options table data structure.

18. (New) The computing system according to claim 15, wherein the instructions cause the processor to reference a selected user option of the one or more user options in one or a plurality of cells of the multi-dimensional electronic spreadsheet by inserting a name of the selected user option as a named range variable in an equation of the one or plurality of cells, and wherein the instructions cause the processor to determine a value of each of the one or plurality of cells by computing the value of the one or plurality of cells according to a value corresponding to a Boolean variable state of the selected user option.

19. (New) The computing system according to claim 17, wherein the user option listing includes an editor through which a name of a user option in the one or more user options is changed.

20. (New) The computing system according to claim 18, wherein the value corresponding to the Boolean variable state is a numerical one when the Boolean variable state is "True," and wherein the value corresponding to the Boolean variable state is a numerical zero when the Boolean variable state is "False."

21. (New) A computer program product comprising a tangible computer useable medium having a computer readable program, wherein the computer readable program, when executed on a computing device, causes the computing device to:

provide a user options table data structure identifying one or more user options that are defined as Boolean variables, wherein the user options table data structure comprises a record for each user option of the one or more user options, and wherein each record stores an identifier associated with a corresponding user option for the record; and

provide a user interface through which the one or more user options are defined, wherein a status of the one or more user options is set via the user interface to either a first Boolean variable state corresponding to a "True" state or a second Boolean variable state corresponding to a "False" state;

reference a selected user option of the one or more user options in one or a plurality of cells of the multi-dimensional electronic spreadsheet by including an identifier associated with the selected user option in content of the one or a plurality of cells;

determine a value of each of the one or plurality of cells based on a status of the selected user option as either being the first Boolean variable state or the second Boolean variable state, as specified via the user interface; and

provide an output of the multi-dimensional electronic spreadsheet via an output device of the computer system.

22. (New) The computer program product according to claim 21, wherein the user interface comprises:

a user options listing portion that lists each of the one or more user options,

a status portion that identifies, for each user option of the one or more user options, a current status of the user option, and

a user controls portion that provides user selectable control elements associated with each of the one or more user options that, when selected by a user via an input device, changes a status of a corresponding user option in the list user options listing and updates a corresponding record in the user options table data structure.

23. (New) The computer program product according to claim 21, wherein the computer readable program causes the computing device to reference a selected user option of the one or more user options in one or a plurality of cells of the multi-dimensional electronic spreadsheet by inserting a name of the selected user option as a named range variable in an equation of the one or plurality of cells, and wherein the computer readable program causes the computing device to determine a value of each of the one or plurality of cells by computing the value of the one or plurality of cells according to a value corresponding to a Boolean variable state of the selected user option.